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## GUIDELINES FOR RESIDENTIAL CLEAN-UP OF BROKEN THERMOMETERS

Note: This method should only be used when cleaning up spills on hard surfaces such as tile, linoleum or wood floors. DO NOT USE THIS METHOD ON CARPET. If carpet, upholstery or other porous surfaces are contaminated with mercury, they should be discarded if possible, or cleaned with a more rigorous method, which is beyond the scope of this document.

**Hazards:** Metallic (Elemental) Mercury, Broken Glass

Homeowners Should Assemble The Following Equipment:

- **Rubber gloves** (ie, dishwashing gloves, vinyl, nitrile or latex gloves used for hobbies, crafts, painting, etc.)
- Two pieces of stiff cardboard, or a rubber squeegee
- Flashlight
- Eye dropper or medicine dropper
- Wide tape (2 inches or wider) such as duct tape or masking tape
- Tissue or paper towel
- **Zip lock bags** (1-3)

<u>Note:</u> Keep children and pets away from the area of the spill before and during clean-up. Minimize disruptive activity in the area, such as that caused by human and/or animal traffic, air movement (i.e., from air supply registers [close registers near the spill until clean-up is complete]) and temperatures above 72°F.

## **Method:**

Do not vacuum with a regular vacuum cleaner. Vacuuming up beads of mercury with a regular vacuum cleaner is dangerous. Carefully follow the procedure below.

- 1. Put on old clothes that could be discarded if they become contaminated during chan-up.
- 2. Put rubber gloves on. Be careful not to touch your face once you begin the clean-up procedure. Also, care should be taken not to step on any debris so that mercury is not tracked through the house on your shoes.
- 3. Carefully pick up pieces of broken glass. Place them on paper towel or tissue. Wrap or fold paper towel, and dispose of by placing into a zip lock bag.

- 4. Use stiff cardboard or rubber squeegee to gather all remaining bits of glass and silver beads of mercury in one place. After doing this, use the flashlight to look all around the floor, into crevices, under bathroom sink pedestal, etc. for additional mercury. The flashlight will reflect off of the shiny silver mercury beads and make it easier to see them. If more glass and/or mercury is found, use the cardboard to push it into the existing pile.
- Use the eyedropper to suck up the mercury beads. Hold the eyedropper almost parallel with the floor. (Holding it upright like a pencil doesn't work very well). You may collect tiny beads by touching the edge of the eyedropper to the bead and gently nudging the bead inside the eyedropper. Clear the eyedropper by *carefully* and *gently* squeezing the contents onto a damp paper towel. Dispose of the paper towel and eyedropper, when finished, by putting them in a plastic zip lock bag.
- 6. Use the sticky side of the wide tape to pick up any remaining glass and mercury beads. Pay special attention to cracks and crevices in tile or wood floors. When finished, place the tape containing glass and mercury into a zip lock bag. Repeat this with a new piece of tape until all visible glass and mercury are picked up.
- 7. When all visible pieces of glass and mercury have been picked up and the clean-up is completed, place stiff cardboard or squeegee into a zip lock bag for disposal.
- 8. Carefully remove rubber gloves and place them in a zip lock bag for disposal. Do not touch the glove fingertips or parts that may have come in contact with mercury.
- 9. Save all of the zip locked bags for disposal during your town's hazardous waste collection day(s).
- 10. Do not vacuum with a regular vacuum cleaner until 2-3 days after the cleanup. Vacuuming up beads of mercury with a regular vacuum cleaner is dangerous. Be sure there are no beads of mercury left before vacuuming. You may want to check again with a flashlight in 2-3 days to be sure no beads of mercury were missed. After this is done, you may vacuum the area as needed.
- 11. If possible, open a window in the room where the thermometer was broken for 24-48 hrs. for ventilation purposes <u>after</u> the clean-up has been completed.

Note that it is very difficult to completely remove mercury beads that have made their way in between cracked surfaces, such as linoleum, ceramic or parquet floor tiles. Sulfur powder can be sprinkled over the area to control continued vaporization, and zinc powder can be rubbed between the cracks to bind any remaining mercury. Both products are sold by safety equipment distributors (ask for mercury spill kits).

FOR FURTHER INFORMATION, CONTACT:	
CT Dept. Public Health	860-509-7740
Environmental & Occupational Health Assessment Program	
CT Poison Control Center	1-800-343-2722
CT Dept. Environmental Protection	860-424-3338
(Emergency spills, 24 hrs/day)	
UCONN Health Center	860-679-2893
Occupational & Environmental Medicine Clinic	
Yale Occupational & Environmental Medicine Clinic	203-785-4197